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## OFFICE OF PETITIONS

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Approved for use through 04/30/2008. OMB 0651-0016  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCEPETITION TO ACCEPT UNAVOIDABLY DELAYED PAYMENT OF  
MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))Docket Number (Optional)  
252302-1100Mail to: Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Fax: (571) 273-8300NOTE: If information or assistance is needed in completing this form, please contact Petitions Information  
at (571) 272-3282.Patent No. 5,974,528 Application Number 09/111,305  
Issue Date October 26, 1999 Filing Date July 7, 1998CAUTION: Maintenance fee (and surcharge, if any) payment must correctly identify: (1) the patent  
number (or reissue patent number, if a reissue) and (2) the application number of the  
actual U.S. application (or reissue application) leading to issuance of that patent to  
ensure the fee(s) is/are associated with the correct patent. 37 CFR 1.366(c) and (d).

Also complete the following information, if applicable

The above-identified patent:

03/07/2008 DALLEN 00000012 5974528

01 FC:1557

700.00 DP

- ☐
- is a reissue of original Patent No. \_\_\_\_\_ original issue date \_\_\_\_\_
- 
- original application number \_\_\_\_\_
- 
- original filing date \_\_\_\_\_
- 
- ☐
- resulted from the entry into the U.S. under 35 U.S.C. 371 of international
- 
- application \_\_\_\_\_ filed on \_\_\_\_\_

## CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is  
(1) being deposited with the United States Postal Service on the date shown below with sufficient  
postage as first class mail in an envelope addressed to Mail Stop Petition, Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450 OR  
(2) transmitted by facsimile on the date shown below to the United States Patent and Trademark  
Office at (571) 273-8300.March 4, 2008  
DateDaniel R McClure  
SignatureDaniel R McClure  
Typed or printed name of person signing Certificate

03/07/2008 DALLEN 00000012 5974528

01 FC:1551

930.00 DP

[Page 1 of 4]

This collection of information is required by 37 CFR 1.378(b). The information is required to obtain or retain a benefit by the public which is to file (and by the  
USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to  
complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any  
comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer,  
U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED  
FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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PTO/SB/85 (10-05)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**1. SMALL ENTITY**☐ Patentee claims, or has previously claimed, small entity status. See 37 CFR 1.27.**2. LOSS OF ENTITLEMENT TO SMALL ENTITY STATUS**☐ Patentee is no longer entitled to small entity status. See 37 CFR 1.27(g).**3. MAINTENANCE FEE (37 CFR 1.20(e)-(g))**

The appropriate maintenance fee must be submitted with this petition, unless it was paid earlier.

| NOT Small Entity                                |               |        | Small Entity                      |               |        |
|---|---------------|--------|-----------------------------------|---------------|--------|
| Amount  | Fee           | (Code) | Amount                            | Fee           | (Code) |
| <input checked="" type="checkbox"/> \$ 930.00   | 3 1/2 yr fee  | (1551) | <input type="checkbox"/> \$ _____ | 3 1/2 yr fee  | (2551) |
| <input checked="" type="checkbox"/> \$ 2,360.00 | 7 1/2 yr fee  | (1552) | <input type="checkbox"/> \$ _____ | 7 1/2 yr fee  | (2552) |
| <input type="checkbox"/> \$ _____               | 11 1/2 yr fee | (1553) | <input type="checkbox"/> \$ _____ | 11 1/2 yr fee | (2553) |

MAINTENANCE FEE BEING SUBMITTED \$ \_\_\_\_\_

**4. SURCHARGE**

The surcharge required by 37 CFR 1.20(i)(1) of \$ 700.00 (Fee Code 1557) must be paid as a condition of accepting unavoidably delayed payment of the maintenance fee.

SURCHARGE FEE BEING SUBMITTED \$ 700.00

**5. MANNER OF PAYMENT**☐ Enclosed is a check for the sum of \$ \_\_\_\_\_☐ Please charge Deposit Account No. \_\_\_\_\_ the sum of \$ \_\_\_\_\_. A duplicate copy of this authorization is attached.☒ Payment by credit card. Form PTO-2038 is attached.**6. AUTHORIZATION TO CHARGE ANY FEE DEFICIENCY**☒ The Director is hereby authorized to charge any maintenance fee, surcharge or petition fee deficiency to Deposit Account No. 20-0778. A duplicate copy of this authorization is attached.

[Page 2 of 4]

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**7. OVERPAYMENT**

As to any overpayment made please

☒ Credit to Deposit Account No. 20-0778

OR

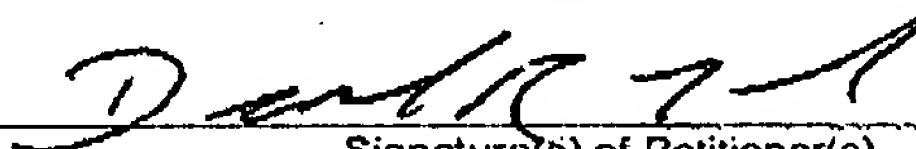
☐ Send refund check.**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**8. SHOWING**

The enclosed statement will show that the delay in timely payment of the maintenance fee was unavoidable since reasonable care was taken to ensure that the maintenance fee would be paid timely and that this petition is being filed promptly after the patentee was notified of, or otherwise became aware of, the expiration of the patent. The statement must enumerate the steps taken to ensure timely payment of the maintenance fee, the date and the manner in which the patentee became aware of the expiration of the patent, and the steps taken to file the petition promptly.

**9. PETITIONER(S) REQUESTS THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT REINSTATED.**

  
 \_\_\_\_\_  
 Signature(s) of Petitioner(s)  
 Daniel R. McClure  
 \_\_\_\_\_  
 Typed or printed name(s)  
 600 Galleria Pkwy, SE, Suite 1500  
 \_\_\_\_\_  
 Address  
 Atlanta, GA 30339  
 \_\_\_\_\_  
 Address

March 4, 2008  
 \_\_\_\_\_  
 Date  
 38,962  
 \_\_\_\_\_  
 Registration Number, if applicable  
 770-933-9500  
 \_\_\_\_\_  
 Telephone Number

**ENCLOSURES:**

- ☒ Maintenance Fee payment  
☒ Statement why maintenance fee was not paid timely  
☒ Surcharge under 37 CFR 1.20(i)(1) (fee for filing the maintenance fee petition)  
☐ Other:

[Page 3 of 4]

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PTO/SB/65 (10-05)

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37 CFR 1.378(d) states: "Any petition under this section must be signed by an attorney or agent registered to practice before the Patent and Trademark Office, or by the patentee, the assignee, or other party in interest."



Signature

March 4, 2008

Date

Daniel R. McClure

Typed or printed name

38,962

Registration Number, if applicable

STATEMENT

(In the space below, please provide the showing of unavoidable delay recited in paragraph 8 above.)

See Attachment "Statement in Support of Petition to Accept Unavoidably Delayed Payment of Maintenance Fee."

(Please attach additional sheets if additional space is needed)

[Page 4 of 4]

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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failure to pay the 3.5 year maintenance fee, and therefore the prosecution of the '683 reissue application is to be terminated and closed.

**Reasons for Unavoidable Delay**

As stated above, the unavoidable delay in the maintenance fee submission in this application resulted from the Examiner's piecemeal and delayed prosecution of the co-pending reissue application (coupled with the PTO's requirement that the patentee surrender all rights to the issued patent).

In this regard, the co-pending reissue application was in substantive condition for allowance before the 3.5 year maintenance fee due date for this patent. However, through a series of newly-raised rejections, with many months passing between Office Actions, the actions of the Examiner in the '683 reissue application resulted in an undue and unreasonably-lengthy prosecution of the '683 reissue application. Furthermore, even with all of that delay considered, the undersigned filed the final papers for placing that application in condition for allowance, on March 8, 2005. Thereafter, the undersigned should have received a prompt notice of allowance, or Order to Show cause. Had the undersigned received such a prompt notice, then the Applicant would have been able to readily submit the maintenance fee payment under the unintentional delay standard and time period. As it stands, however, the PTO delayed nearly three years (with no action on the PTO's part in the intervening period – and despite repeated requests by the undersigned to provide the status of that application) before mailing that order. Consequently, the delay in submission of the maintenance fee was unavoidable.



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Applicant submits herewith an appropriate petition, along with payment of both the 3.5 year maintenance fee as well as the 7.5 year maintenance fee, which should bring this patent back into good standing and effect. Of course, once reinstated, the co-pending '683 reissue application should be allowed, and the '528 will be surrendered in favor of the patent that issues from the '683 reissue application.

Simply stated, it would be unfair to Winbond Electronics Corp. to take the hard-line position to not accept the delayed payment of the maintenance fee and require Winbond to forfeit all rights, in view of Winbond's clear desire to maintain that patent in effect (evidenced by the prompt and continued prosecution efforts in the '683 reissue application), coupled with the PTO's delay and piecemeal prosecution, which ultimately led to the lengthy delay at issue.

If any additional documentation or statements are required of the undersigned, you are hereby invited to call the undersigned at 770-933-9500. Likewise, if any additional fee is believed to be due, you are hereby authorized to charge any such fee to deposit account 20-0778.

Respectfully submitted,



Daniel R. McClure  
Registration No. 38,962

**THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.**  
Suite 1500  
600 Galleria Parkway S.E.  
Atlanta, Georgia 30339  
(770) 933-9500

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**CERTIFICATE OF FACSIMILE TRANSMISSION  
UNDER 37 CFR §1.8**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted on the date indicated below via facsimile to the United States Patent and Trademark Office, facsimile number (571) 273-8300.

Date: March 4, 2008

Daniel R. McClure  
Daniel R. McClure

In re application of: **Tsai, et al.**

U.S. Patent Number: **5,974,528**

Art Unit: **2783**

Issue Date: **October 26, 1999**

Examiner: **El Hady, Nabil M.**

Our Reference Number: **252302-1100**

Title: **Microcomputer with Embedded Flash Memory having On-Chip Programming Capability and Method of Programming Data into the Embedded Flash Memory**

**Petition to Accept Unavoidably Delayed Payment of Maintenance Fee**

**Statement in Support of Petition to Accept Unavoidably Delayed Payment of Maintenance Fee (including Exhibits A-C)**

**Credit Card Authorization \$700.00 (petition fee)**

**Credit Card Authorization \$930.00 (3.5 year maintenance fee)**

**Credit Card Authorization \$2,360.00 (7.5 year maintenance fee)**

**Total Pages Transmitted (including cover sheet) - 37**



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McClure, Dan

From: Barnhill, Hui Chin  
Sent: Tuesday, January 21, 2003 10:53 AM  
To: McClure, Dan  
Subject: 252302-1101; Serial No. 09/984,683

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Dan:

Examiner Elhady called re: the Reissue for this application. He is allowing the case, but needs the following faxed to him:

- 1) Statement of Surrender of Original Patent;
- 2) Corrected marked up (underlined) copy of claims relative to original patent (he said the annotated version filed was not correct, thus the Amendment was not entered);
- 3) Claims 43-44 were not addressed in the Amendment; and
- 4) Claim 40, line 6 - after "respond", insert --to--.

His phone number is 703-308-7990

His fax number is 703-746-7238/39/40

-HCB

Cancel claim 43  
re-write 44 to include 42 + 43

**TKHR**

**THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.**

ATTORNEYS AT LAW

100 Galleria Parkway, NW  
Suite 1750  
Atlanta, GA 30339-5948  
Telephone: (770) 933-9500  
Facsimile: (770) 951-0933  
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Daniel R. McClure  
ext. 259

e-mail: dan.mcclure@tkhr.com

**FACSIMILE TRANSMISSION**

February 4, 2003

[252302-1101]

**TO**

Mr. Examiner El Hady  
FAX: (703) 746-7238

**From**

Daniel R. McClure  
FAX: 770-951-0933

TEL.: (703) 308-7990

TEL.: 770-933-9500 (Ext. 259)

**RE: Draft Amendment for Serial No 09/984,683**

(Message)

Number of Pages (Including This Cover Sheet): - 12 - Page(s)  
PLEASE ACKNOWLEDGE SAFE AND CLEAR RECEIPT OF ALL PAGES.

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INTERNATIONAL PATENT, TRADEMARK AND COPYRIGHT LAW AND RELATED LITIGATION

Huntsville, Alabama

Atlanta, Georgia

**Exhibit B**

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application Of: Tsai, et al.

Serial No.: 09/984,683

Filed: October 25, 2001

Group No.: 2183

Examiner: El Hady, Nabil M.

Docket No. 252302-1101

For: Microcomputer With Embedded Flash  
Memory Having On-Chip Programming  
Capability and Method of Programming Data  
into the Embedded Flash Memory

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Transmittal to Examiner El Hady

Dear Examiner El Hady:

In follow-up to our teleconference of earlier today, attached are a statement of surrender of the original issued letters patent, and also a supplemental amendment and response to the Office Action of July 12, 2002. It is my understanding that the previous amendment was not entered, since it did not address all issues. The corrections that you requested have been included in the attached amendment.

Specifically, the changes include:

- (1) the insertion of the word --to-- after "respond" in claim 40, line 6;
- (2) correction with regard to claims 43 and 44 (incorporating those limitations into claim 42);
- (3) providing a corrected marked-up version of the amendments (relative to the issued patent); and
- (4) the inclusion of a statement of surrender of the original patent.

**Exhibit B**

Please let me know if there are any further outstanding issues.

Respectfully Submitted,

**THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.**

By:   
**Daniel R. McClure; Reg. No. 38,962**

Suite 1750, 100 Galleria Parkway  
Atlanta, Georgia 30339-5948  
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Annotate Version of Claims Added in Reissue Application

34. A method for use on a microcomputer having a microprocessor unit including an embedded flash memory unit, the embedded flash memory unit having a loader block and a user block, the loader block being used for storing a loader program, the user block being used for storing at least one application program, the method comprising:

switching the loader block of the embedded flash memory by the microprocessor unit as an active block and connecting the loader block to the microprocessor unit;

executing the loader program stored in the loader block of the embedded flash memory unit by the microprocessor unit to perform a programming process, the programming process including:

receiving data from an external circuitry, the data having at least one block;

determining a period of time required to program the block into the user block of the embedded flash memory unit;

writing the block of the data into the user block of the embedded flash memory unit;

and

issuing an interrupt signal at the end of the period of time; and

switching the user block of the embedded flash memory by the microprocessor unit as an active block corresponding to the interrupt signal.

36. A method for use on a microcomputer, the microcomputer having a microprocessor unit including an embedded flash memory unit, the embedded flash memory unit having a loader

A-1

Exhibit C

block and a user block, the loader block being used to store a loader program, the method comprising the steps of:

checking whether a request for a data reprogramming process is received; and  
if the request being received,

switching an active block of the embedded flash memory unit to the loader block  
by the microprocessor unit to load the loader program;

receiving data required to write and programming the data into the user block of  
the embedded flash memory unit according to the loader program; and

switching the active block of the embedded flash memory unit to the user block, after the  
following steps:

determining a period of time to write the data into the user block of the embedded flash  
memory unit; and

at the end of the determined period, generating an interrupt signal used to switch the active  
block of the embedded flash memory unit from the loader block to the user block.

37. The method of claim 36, the data having at least one block, the period being determined  
according to a time required to write the block into the user block.

38. The method of claim 37, the step of receiving the data and programming a received  
block into the user block of the embedded flash memory unit further including:

temporally storing a next block to be programmed in a storing device while a current block  
sent to be programmed into the user block of the embedded flash memory unit; and

transferring a stored block to be programmed into the user block.



39. The method of claim 38, wherein the storing device is a register set.

40. The method of claim 36, wherein after the request being received and before switching the active block of the embedded flash memory unit to the loader block further including:  
switching the microprocessor unit to a programming mode; and  
enabling an interrupt function of the microprocessor unit, thereby allowing the microprocessor unit to respond to an interrupt signal, wherein the interrupt signal is generated after completing the programming of the data into the user block.

41. The method of claim 40, wherein after completion of the programming of the data into the user block and before switching the active block of the embedded flash memory unit to the user block, further comprising the steps of:

waking up the microprocessor unit by the interrupt signal to resume operation; and  
disabling the interrupt function of the microprocessor unit.

42. A microcomputer having an on-chip programming capability, the microcomputer comprises:

a microprocessor unit; and  
an embedded flash memory unit coupled to the microprocessor unit, the embedded flash memory unit having a loader block and a user block, the loader block being used for storing a loader program, the user block being used for storing at least one application program, wherein  
when the microprocessor unit being entered into a programming mode, the loader program being executed and desired data being received by the microprocessor unit from an

external circuitry, and

when the microprocessor unit being entered into an idle mode, the received data being loaded into the user block;

wherein after the loader program being executed, the microprocessor unit transmitting the received data into the user block until an interrupt signal being received by the microprocessor unit, the data being received by the microprocessor having at least one block, the interrupt signal being issued depending on a period of time required to program the block into the user block of the embedded flash memory unit.

45. The microcomputer of claim 42, further comprising a data bus, coupled to the microprocessor unit and the embedded flash memory unit, wherein

when the microprocessor unit being entered into the programming mode, the data bus being coupled to the loader block of the embedded flash memory unit, and

when the microprocessor unit being entered into an idle mode, the data bus being coupled to the user block of the embedded flash memory unit.

46. The microcomputer of claim 45, the embedded flash memory unit further comprising an I/O circuit for alternatively coupling the user block or the loader block of the embedded flash memory unit with the microprocessor unit through the data bus.

47. The microcomputer of claim 46, wherein selection of the I/O circuit for is coupling the user block or the loader block of the embedded flash memory unit with the microprocessor unit is controlled by a memory selection signal.

48. The microcomputer of claim 47, the memory selection signal is issued by the microprocessor unit.

49. The microcomputer of claim 48, further comprising a register set for storing the data transmitted by the microprocessor unit and an address value and control instructions associated with the transmitted data.

50. The microcomputer of claim 49, the register set comprising  
a data register, for storing the transmitted data;  
an address register, for storing the address value associated with the transmitted data; and  
a control register, for storing the control instructions associated with the transmitted data.

51. The microcomputer of claim 45, further comprising a bus multiplexer, for alternatively coupling the user block or the loader block of the embedded flash memory unit with the microprocessor unit through the data bus.

52. The microcomputer of claim 51, wherein selection of the bus multiplexer for is coupling the user block or the loader block of the embedded flash memory unit with the microprocessor unit is controlled by a bus selection signal.

53. The microcomputer of claim 52, the bus selection signal is issued by the microprocessor unit.

54. The microcomputer of claim 53, further comprising a register set for storing the data transmitted by the microprocessor unit and also for storing an address value and control instructions associated with the transmitted data.

55. The microcomputer of claim 54, the register set comprising  
a data register, for storing the transmitted data;  
an address register, for storing the address value associated with the transmitted data; and  
a control register, for storing the control instructions associated with the transmitted data.